



ENVIRONMENTAL LAW & POLICY CENTER
Protecting the Midwest's Environment and Natural Heritage

March 1, 2010

MaryAnn Stevens
Senior Environmental Manager
Rules Development Branch
Office of Legal Counsel
Indiana Department of Environmental Management

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IDEM-OLC

Re: Fiscal Impact Analysis for Proposed Indiana Antidegradation Rules

Dear Ms. Stevens:

Indiana Code 4-22-2-28 requires the Indiana Department of Environmental Management (IDEM) to provide information to the Office of Management and Budget (OMB) regarding the fiscal impacts of proposed agency rules on the state and all persons regulated by the proposed rule. On January 29, 2010, IDEM requested information from interested parties regarding the fiscal impacts of IDEM's draft antidegradation implementation rules (LSA Document # 08-764, Amendments to 327 IAC 2-1.3).

The Environmental Law & Policy Center has been involved in antidegradation policy development in Indiana and in several other Midwestern states for many years. ELPC has been working with many local partners in this rulemaking proceeding, including the Hoosier Environmental Council, the Alliance for the Great Lakes, the Conservation Law Center, Natural Resources Defense Council, Sierra Club Hoosier Chapter, Save the Dunes, and other groups. Many of these groups contributed information to these comments.

As discussed below, the "fiscal impact" of these proposed regulations will be minimal compared to the significant ecological, cultural and economic value that compliance with the

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Clean Water Act's antidegradation policy will deliver to Indiana communities. Moreover, compliance with the Clean Water Act is not optional. Thus, IDEM is required to adopt regulations that comply with 40 C.F.R. § 131.12 regardless of the fiscal impact. If Indiana does not adopt legal antidegradation implementation regulations, then it is likely that U.S. EPA will promulgate regulations for the state of Indiana, likely at a much higher cost.

Well-designed antidegradation implementation procedures will not impose unreasonable costs for Indiana's regulated community. In fact, the antidegradation policy at 40 C.F.R. § 131.12 is designed to accommodate important social and economic development – not prevent it. The Environmental Coalition has submitted detailed comments to IDEM that recommend a streamlined and reasonable antidegradation approach to minimize unnecessary complexity and costs. *See* Environmental Coalition, Antidegradation Rulemaking Second Notice Comments (dated Jan. 29, 2010).

Second, it is absolutely critical that IDEM not lose sight of the important socioeconomic benefits that come hand in hand with investments in water quality protection. These economic benefits are directly relevant to the OMB's duty to assess the "effect that compliance with the proposed rule will have on the state." *See* Indiana Code 4-22-2-28(d). If Indiana's waters are given the protection they deserve, the state can expect to see a myriad of socioeconomic benefits ranging from a boost in the state's outdoor recreation economy to improved quality of life conditions for Indiana's communities. Strong rules to protect Indiana's rivers, lakes and streams will also promote and protect the ecological, scientific and historic value of Indiana's most precious natural resources. The discussion that follows will ultimately show how a strong antidegradation policy will result in significant socioeconomic benefits that vastly outweigh any potential costs associated with water quality protection and improvement.

I. Higher water quality standards for Indiana's lakes, rivers and streams will provide Hoosiers with important economic benefits.

With over 1,000 lakes,¹ a national lakeshore and many river recreation areas, the state of Indiana provides Hoosiers with countless opportunities for water based recreation. As Hoosiers fish, swim, hike, boat and wildlife watch in and alongside Indiana's waters, they spend a significant amount of money on gear, licensing fees, fuel and other trip related expenses. In turn, these purchases help support Indiana's communities by generating tax dollars, jobs and revenue. To better understand the economic force of Indiana's outdoor recreation industry, one must first examine the number of Hoosiers who value and participate in outdoor recreation activities. By understanding the number of people who engage in outdoor recreation (and how much money individuals spend while recreating) it is then possible to understand the economic benefits associated with Indiana's outdoor recreation industry.

Hoosiers value outdoor recreation

In a state with over 6 million people,² the number of residents and non-residents who take advantage of Indiana's natural resources is truly remarkable. There are more fishing days in the state of Indiana than there are people³ and in the 2008-2009 fiscal year approximately 15 million visits were made to Indiana State Parks and Reservoirs.⁴ State based recreation surveys and visitation statistics from the Indiana Department of Natural Resources (DNR) clearly show that Hoosiers value outdoor recreation opportunities in their home state:

¹ *Researchers discover high levels of algal toxins in Indiana lakes*, Indiana University School of Public and Environmental Affairs (Nov. 16 2009), http://www.indiana.edu/~spea/research/jones_algal.shtml.

² U.S. Census Bureau, State and County Quick Facts, 2008 Estimate

³ 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. U.S. Fish & Wildlife Service.

⁴ Indiana DNR Statistics, Parks and Reservoirs Visitation, FY 2008-2009. Available at: <http://www.in.gov/dnr/parklake/2441.htm>

- When asked about the importance of outdoor recreation, 93% of respondents in the IN Outdoor Recreation Survey indicated that outdoor recreation is either essential or desirable.⁵
- The Indiana Outdoor Recreation Survey found that 92% of survey respondents were involved in an outdoor recreation activity during the previous year.⁶
- Of the millions of visits made to state parks and reservoirs in the 2008-2009FY, over a million visits were made to the Indiana State Dunes Park.⁷
- The Indiana Dunes National Lakeshore boasted approximately 2 million recreational visitors in 2009.⁸
- More recreational visits were made to the Indiana Dunes National Lakeshore and State Park in 2009 than Rocky Mountain National Park (NP), Grand Teton NP and Glacier NP.⁹
- In the rolling hills of south central Indiana, Lake Monroe receives over 1.5 million visitors on an annual basis.¹⁰
- In 2006, the United States Fish and Wildlife Service (USFWS) found that “an estimated 90% of all Indiana residents who fished did so in their home state.”¹¹
- According to a 2001 survey conducted by the Center for Urban Policy and Environment, nearly five in 10 households in central Indiana visited a regional water recreation site.¹²

When looking specifically at participation numbers for wildlife related activities, the numbers continue to show that Hoosiers value outdoor recreation in and alongside Indiana’s waters. In 2006, 2.6 million people fished, hunted or engaged in wildlife watching activities in

⁵Reported in the 2006-2010 Statewide Comprehensive Outdoor Recreation Plan, page 24

⁶ Ibid.

⁷ Indiana DNR Statistics, Parks and Reservoirs Visitation, FY 2008-2009

⁸ Annual Park Visitation statistics available through the National Park Service Statistics Service Website, <http://www.nature.nps.gov/stats/park.cfm>.

⁹ According to NPS & DNR statistics, the Indiana Dunes National Lakeshore and State Park received approximately 3 million recreational visitors in 2009, while Rocky Mtn. National Park received 2.8 million, Grand Teton NP 2.5 million and Glacier NP around 2 million.

¹⁰ *Indiana: Lake Monroe*. Indiana Department of Natural Resources Brochure. Available at: http://www.in.gov/dnr/parklake/files/monroe_trail.pdf

¹¹ 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, page 8.

¹² Don Sapp and Sue Burow, *Central Indiana Residents Value Outdoor Water Recreational Opportunities* (July 2001), page 1, https://www.policyarchive.org/bitstream/handle/10207/82/76_01-C21_Waterways.pdf?sequence=1.

the state of Indiana. Of the 2.6 million people who participated in wildlife related activities, 768,000 state residents and non-residents fished in Indiana, spending an average of 13 days out of the year fishing.¹³ Collectively, residents and non-residents amassed a total of 9.8 million fishing days in Indiana in 2006, which means Indiana boasts more fishing days than over half the states in the country.¹⁴

Table 1: Number of anglers, hunters & wildlife watchers in Indiana (residents and non-residents)¹⁵

	Number of Participants	Total Participation Days	Days of hunting, fishing & wildlife watching per person
Anglers	768,000	9,805,000	13
Hunters	272,000	4,808,000	18
Wildlife Watchers	2,042,000	24,013,000 ¹⁶	32 ¹⁷

Outdoor recreation participation and its economic rewards

As millions of visits are made to Indiana's state parks, lakes, rivers and streams for recreation opportunities, the entire state receives a host of economic rewards. Economic benefits from recreational spending include support for jobs, salaries, wages and business earnings, along with increased revenue for state and local taxes. On average, anglers spent \$25 per fishing trip in 2006 and an average of \$773 on trips for the entire year. On equipment alone, anglers collectively spent \$316 million in Indiana in 2006. All told, fishing related expenditures totaled \$627 million in Indiana in 2006.¹⁸ The American Association of Sportfishing estimates that

¹³ 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation

¹⁴ Ibid; American Sportfishing Association, *Sportfishing in America: An Economic Engine and Conservation Powerhouse* (Revised January 2008). Available at: http://www.asafishing.org/images/statistics/resources/SIA_2008.pdf.

¹⁵ 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation

¹⁶ Reflects total days of participation away from home

¹⁷ Reflects total days of participation away from home

¹⁸ 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation

during the same year, sportfishing in Indiana helped support 14,254 jobs, \$406,941,848 in salaries, wages and business earnings and \$77,789,225 in state and local tax revenues.¹⁹

Boaters in Indiana also spend a significant amount of money when recreating on Indiana's lakes, reservoirs and rivers. According to the Indiana Boater Survey, general population boaters spent an average of \$126 per person per trip in 2004, while registered boaters spent an average of \$44 dollars per person per trip. When looking at the big picture, boating expenditures totaled \$650 million in 2004.²⁰

Expenditures from outdoor recreation activities are especially important for those communities in Indiana that rely heavily on tourism. In Porter County Indiana, the National Park Service found that visitors to the Indiana Dunes National Lakeshore generated approximately "\$58 million in spending at local businesses in 2007."²¹ When adding together spending at both the national and state parks, the Porter County Convention and Visitors Bureau estimates that the Indiana Dunes account for approximately "45 percent of all direct visitor spending in the County."²²

Table 2: Average trip expenditures by anglers, hunters & wildlife watchers in Indiana (residents and non-residents)²³

	Average trip expenditure per day	Average per angler, hunter or wildlife watcher
Anglers	\$25	\$773
Hunters	\$14	\$791

¹⁹ American Sportfishing Association, *Sportfishing in America: An Economic Engine and Conservation Powerhouse* (Revised January 2008).

<http://www.asafishing.org/images/statistics/resources/Sportfishing%20in%20America%20Rev.%207%2008.pdf>.

²⁰ Reported in the 2006-2010 Statewide Comprehensive Outdoor Recreation Plan, pages 29-31.

²¹ Porter County Convention, Visitor and Recreation Bureau, *Indiana Dunes: A Natural Backdrop with Economic Benefits*, BusIness (Aug. 9 2009), <http://nwitimes.com/app/inbusiness/?p=1602>.

²² Ibid.

²³ Statistics included in Tables 2-3 are from the 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation

Wildlife Watchers	\$6	\$453
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Table 3: Total expenditures by anglers, hunters & wildlife watchers in Indiana (residents and non-residents)

	Total Expenditures	Trip Related	Equipment and Other
Anglers	\$627,167,000	\$242,624,000	\$384,543,000
Hunters	\$223,023,000	\$65,553,000	\$157,470,000
Wildlife Watchers	\$933,920,000	\$143,615,000	\$790,305,000

Table 4: Economic Impact of Sportfishing in Indiana (2006)²⁴

Total Multiplier or Ripple Effect	Salaries, Wages and Business Earnings	Jobs	Federal Tax Revenues	State and Local tax Revenues
\$1,382,834,777	\$406,941,848	14,254	\$93,156,219	\$77,789,225

Without strong rules to protect and promote water quality, Indiana communities risk losing the economic benefits associated with outdoor recreation

The aforementioned discussion clearly shows that protecting Indiana's waters is economically important for the state. However, without strong rules to protect and promote clean water, the state and local communities risk losing current and future sources of recreational revenue. Studies show that recreation goers are sensitive to the quality and clarity of water when deciding where to recreate. A study conducted by Iowa State University in 2004 found that recreation goers are less likely to visit waters that are high in nutrients and that overall, recreation goers are responsive to physical water quality measures.²⁵ In Indiana, a report released in 1994 found that Indiana anglers are "reasonably sensitive to changes in water quality"

²⁴ Statistics from *Sportfishing in America: An Economic Engine and Conservation Powerhouse*.

and that a reduction in water pollutants increases per trip welfare.²⁶ If Indiana fails to protect and invest in its high quality waters, the state could see fewer and fewer recreation goers and as a result, a weakened outdoor recreation economy.

II. Strong rules to protect and promote water quality will provide Hoosiers with many quality of life benefits.

Not only can higher water quality stimulate tourism, jobs, and revenue, but it also provides Hoosiers with improved quality of life conditions. First, and perhaps most importantly, higher water quality standards for Indiana's waters will help ensure that swimmers, boaters and fishers are provided with clean and safe conditions while enjoying Indiana's natural resources. In particular, without proper standards to protect Indiana's waters against nutrient pollution, residents and wildlife are at greater risk of suffering the severe health effects caused by toxic cyanobacteria. Cyanobacteria (or blue-green algae) thrive in waters polluted by nitrogen and phosphorus. Toxins produced by these bacteria are known to be harmful to humans and wildlife. If ingested, cyanobacteria toxins can cause headaches, vomiting and nausea, and in the worst case scenario respiratory distress and neurological problems.²⁷ Currently, many of Indiana's lakes and reservoirs suffer from high levels of cyanobacteria toxins, especially when compared at the national level.²⁸ Proper antidegradation implementation procedures will require dischargers to consider the necessity of additional nutrient pollution in ways that existing water quality standards do not.

²⁵ Egan, Kevin, et al., *Recreation Demand Using Physical Measures of Water Quality*, Center for Agricultural and Rural Development-Iowa State University (October 2004).

²⁶ R S Tay and P S McCarthy, "Benefits of improved water quality: a discrete choice analysis of freshwater recreational demands" *Environment and Planning A* 26(10) 1625 – 1638 (1994).

²⁷ *What you should know about blue-green algae*, Minnesota Pollution Control Agency (December 2007, <http://www.pca.state.mn.us/publications/wq-s1-03.pdf>)

²⁸ *Researchers discover high levels of algal toxins in Indiana lakes*, Indiana University School of Public and Environmental Affairs (Nov. 16 2009), http://www.indiana.edu/~spea/research/jones_algal.shtml.

Increased access to higher quality waters can also provide Hoosiers with more recreational opportunities, support a healthier living environment, improve the aesthetics of a community and promote environmental stewardship and awareness. These quality of life benefits make it easier for people to feel connected to their community and make a community as a whole a more attractive place to live. Quality of life conditions are especially important to consider as Indiana looks for ways to retain young residents and attract new businesses and highly educated and skilled workers to the state.

Finally, it is important to note that protecting Indiana's lakes, rivers and streams from unnecessary pollution is ecologically, scientifically and historically important for the state of Indiana. Healthy waters provide critical habitat for fish, plants, insects, waterfowl, reptiles and many small mammals. In turn, this critical habitat provides Hoosiers with countless opportunities for wildlife watching and fishing, it also provides the state with vital scientific information and educational opportunities. Without a proper system in place to protect this habitat, Indiana and the nation could forever lose some of its most valuable ecological treasures.

ELPC appreciates the opportunity to submit these comments. We look forward to continuing to work with IDEM, our colleagues in the Environmental Coalition, and other interested parties in this rulemaking proceeding.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Brad Klein".

Brad Klein
Staff Attorney

